



**The University of Jordan**

**Accreditation & Quality Assurance Center**

**COURSE Syllabus**

<b>1</b>	Course title	<b>Marine Biology</b>
<b>2</b>	Course number	<b>5501301</b>
<b>3</b>	Credit hours (theory, practical)	2 theory +1 practical
	Contact hours (theory, practical)	
<b>4</b>	Prerequisites/corequisites	5501102
<b>5</b>	Program title	Bachelor in Marine Biology
<b>6</b>	Program code	5501
<b>7</b>	Awarding institution	The University of Jordan-Aqaba
<b>8</b>	Faculty	Marine Sciences
<b>9</b>	Department	Marine Biology
<b>10</b>	Level of course	Third year
<b>11</b>	Year of study and semester (s)	First semester 2014/2015
<b>12</b>	Final Qualification	BSc.
<b>13</b>	Other department (s) involved in teaching the course	non
<b>14</b>	Language of Instruction	English
<b>15</b>	Date of production/revision	2011

**16. Course Coordinator:**

*Office numbers, office hours, phone numbers, and email addresses should be listed.*

Prof. Maroof A. Khalaf,  
Tel. 03-2090450-35073  
Office hours;  
e-mail; m.khalaf@ju.edu.jo

**17. Other instructors:**

*Office numbers, office hours, phone numbers, and email addresses should be listed.*

Prof. Maroof A. Khalaf,  
Tel. 03-2090450-35073  
Office hours;  
e-mail; m.khalaf@ju.edu.jo

**18. Course Description:**

*As stated in the approved study plan.*

This course is introduction to organisms living in saltwater ecosystems. Topics include In-depth studies of marine ecosystems and organisms, including physiology, behaviour and ecology.

## 19. Course aims and outcomes:

**Part I. The Ocean Environment:** Fundamentals of Ecology:

**Part II. Marine Organisms Multicellular Primary Producers: Multicellular Algae. Marine Flowering Plants**

Lower Invertebrates: What is an animals? Sponge- Cnidarians: Animals with Stinging cells, Ctenophores- Lophophorates

Higher Invertebrates: Molluscs-

Arthropods: Animals with Jointed Appendages

Echinoderms: Animals with Spiny Skins- Hemichordates

Marine Fishes: Fishes and Other Vertebrates

Jawless Fishes- Cartilaginous Fishes- Lobefins- Ray-Finned Fishes

**Marine Ecosystems:** Coral Reef Communities: Organisms That Build coral Reef

Reef Formation- Types of Coral reef- Reef Structure- Coral Reef Distribution- Coral Ecology- Threats to Coral reef Communities

- The course will provide the students with information on the ocean environment and the study of ecology: ecology and the physical environments, populations, communities.
- The course will provide the students with the basic understanding of the biology and ecology of marine organisms such as multicellular primary producers, lower invertebrates, higher invertebrate and marine fishes.
- The topics covered in this course will allow the students to better comprehend other courses related to marine ecosystems: coral reef communities.

**B- Intended Learning Outcomes (ILOs):** Upon successful completion of this course students will be able to ...

### Learning outcomes:

- **Knowledge and understanding**

At the end of this module, students will be able to:

- Know what is the Ocean environment: fundamentals of ecology.

- Know the biology and ecology of marine organisms multicellular primary producers: multicellular algae. marine flowering plants , lower invertebrates: Sponge- Cnidarians, ctenophores- lophophorates, higher invertebrate: molluscs, arthropods, echinoderms: and hemichordates, marine fishes. of Fishes

- Know what is marine ecosystems: coral reef communities.

- **Cognitive skills (thinking and analysis).**

- The thinking skills will be developed by encouraging students to conclude answers to different questions that the instructor intends to use during the presentation of the scientific material.

- The instructor intends to stimulate the student's analytical thinking side via connections with general aspects in daily life or through questions, net searching, and home works.


## 20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
<b>1. The Ocean Environment:</b> Fundamentals of Ecology: The study of Ecology. Ecology and the physical Environments. Populations. Communities	1-3			Quiz	
<b>Marine Organisms:</b> Multicellular Primary Producers: Multicellular Algae. Marine Flowering Plants	4-7			Quiz	
Lower Invertebrates: What is an animals? Sponge- Cnidarians: Animals with Stinging cells Ctenophores- Lophophorates	8-10			Quiz	
<b>Higher Invertebrates:</b> Molluscs-  Arthropods: Animals with	11-13			Quiz	

Jointed Appendages Echinoderms: Animals with Spiny Skins- Hemichordates					
<b>Marine Fishes:</b> Fishes and Other Vertebrates Jawless Fishes- Cartilaginous Fishes- Lobefins- Ray-Finned Fishes	14-16				
<b>Marine Ecosystems: Coral Reef Communities:</b> Organisms That Build coral Reef  Reef Formation- Types of Coral reef- Reef Structure- Coral Reef Distribution- Coral Ecology- Threats to Coral reef Communities.					

## 21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

Power point lectures, questions and discussions, videos, home works, lab work

Assignments such as preparing of reports on topics related to the subject.

Students are requested to present a power point presentation on a subject of his/her choice within the framework of the study material.

## 22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

1. Quizzes
2. Power point presentations
3. Home work
4. Lab work
5. Participation in the class
6. Mid Exam
7. Final Exam

### 23. Course Policies:

**A- Attendance policies:** I strongly recommend you attend every lecture. Missing any class will put you at a distinct disadvantage when test taken. 2- Any student with six or more unexcused absences from lecture sessions can be legally dropped from the course.

**B- Absences from exams and handing in assignments on time:** The only valid excuses for missing an exam are: death in the family, illness, or accident. In this case you must provide evidence of some kind and you must report me within 3 days.

**C- Health and safety procedures:** Students who miss the exam due to illness or other excuse must notify me within the first week after the exam, so make up arrangements can be Made.

**D- Honesty policy regarding cheating, plagiarism, misbehavior:**

1. Students are not expected to talk in class while the instructor is lecturing
2. After two warning of talking or any other classroom disruption, the Student will be automatically removed from the class.
3. Any act of cheating, or academic misconduct is subject to penalties.
4. The minimum penalty for any students caught cheating will receive a zero on that test.

**E- Grading policy:** I will base your grade on your performance in the exams and classroom

Type	Grading
Quizzes, Scientific reports and participation	20%
Midterm exam:	30%
Final Exam:	50%

**Exams:** The examinations will consist of any combination of Multiple choice, short answer, fill in the blank, matching, identification of figures or essay questions

**F- Available university services that support achievement in the course:** Books in the library, data show, printers, scanners

Mid Term 30%, Reports, research projects, Home works, presentations 15%, Quizzes. 10%, Final Exam 50%

Available university services that support achievement in the course:

Library sources are available, internet, laboratory facilities

**24. Required equipment:**

- 1. Lab top
- 2. Data how
- 3. white board
- 4. Printer
- 5. scanner
- 6. markers

**25. References:**

- A- Required book (s), assigned reading and audio-visuals:  
**Textbook:** All required readings are in the Karleskint, G; Turner, R and Small, JW. 2008. Introduction to Marine Biology. Third edition, pp. 581
  
- B- Recommended books, materials, and media: Internet access, videos

**26. Additional information:**

Name of Course Coordinator: -----Signature: ----- Date: -----

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

Copy to:

Head of Department  
Assistant Dean for Quality Assurance  
Course File